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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

olicant:

SCARINGE, S,

Examiner: SISSON, Bradley

Serial No.:

10/635,108

Group Art Unit: 1642

Filed:

August 5, 2003

For:

Short Interfering RNA's Having a Hairpin Structure Containing a Non-

Nucleotide Loop

Customer No.:

23719

Kalow & Springut LLP

488 Madison Avenue, 19th Floor New York, New York 10022

September 27, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

Applicants submit herewith the following disclosure in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98.

I. U.S. PATENT DOCUMENTS

Patent No.	Date Issued	<u>Title</u>
Re. 34,069	9-15-1992	Process for the Preparation of Oligonucleotides
5,747,244	5-5-1998	Nucleic Acid Probes Immobilized on Polystyrene Surfaces
5,869,696	2-9-1999	Universal Solid Support and Methods for their use
5,874,568	2-23-1999	Coupling Unit of (6-4) Photoproduct, Process for Preparing the Same, Process for Preparing Oligonucleotide containing (6-4) Photoproduct by using the same and process for preparing DNA containing (6-4) photoproduct by using the same

Certificate of Express Mailing Under 37 C.F.R. § 1.10

I hereby declare that on the date indicated below, this correspondence is being deposited with the United States Postal Service via Express Mail Label No. EV 279582583 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450 on

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Applicant: SCARINGE, S. Serial No.: 10/635,108
Filed: August 5, 2003
Second Supplemental IDS
September 27, 2004

Page 2 of 3

5,889,136	3-30-1999	Orthoester protecting groups in RNA Synthesis
5,932,718	8-3-1999	Oligonucleotides having modified internucleoside linkages or terminal amino group
6,008,400	12-28-1999	Orthoester reagents for use as protecting groups in oligonucleotide synthesis
6,111,086	8-29-2000	Orthoester protecting groups
US 6,210,880 B1	4-3-2001	Polymorphism analysis by nucleic acid structure probing with structure bridging oligonucleotides
US 6,294,664 B1	9-25-2001	Synthesis of Oligonucleotides
US 6,362,323 B1	3-26-2002	Non-nucleotide containing nucleic acid
US 6,380,377 B1	4-30-2002	Nucleic acid hairpin probes and uses thereof
US 6,489,464 B1	12-3-2002	Branched Oligonucleotides as pathogen- inhibitory agents
US 6,596,490 B2	7-22-2003	Nucleic acid hairpin probes and uses thereof
US 6,677,471 B2	1-13-2004	Intermediates for the synthesis of Oligonucleotide analogues
US 6,696,255 B2	2-24-2004	Nucleic acid hairpin probes and uses thereof
US 2003/0194741 A1	10-16-2003	Combinatorial protecting group strategy for multifunctional molecules
US 2004/0096947 A1	5-20-2004	Building blocks for the solution phase synthesis of oligonucleotides
US 2004/0152905 A1	8-5-2004	Universal building blocks and support media for synthesis of oligonucleotides and their analogs

II. FOREIGN PATENT DOCUMENTS

Publication No. <u>Country</u> <u>Publication Date</u>

III. NON PATENT PUBLICATIONS

Glen Research Corporation Catalog, 1999.

PILS, Werner, et al., Flexible non-nucleotide linkers as loop replacements in short double helical RNAs, Nucleic Acids Research, Vol. 28, No. 9, pages 1859-1863 (2000).

SCARINGE, Stephen A., et al., Novel RNA Synthesis Method Using 5'-O-Sily1-2'-O-orthoester Protecting Groups, J. Am. Chem. Soc., Vol. 120, No. 45, pages 11820-11821 (1998).

THELWELL, Nicola, et al., Mode of action and application of Scorpion primers to mutation detection, Nucleic Acids Research 2000, Vol. 28, No. 19, pages 3752-3761 (2000).

Applicant:

SCARINGE, S.

Serial No.:

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August 5, 2003

Second Supplemental IDS September 27, 2004

Page 3 of 3

The items listed above are identified on the accompanying Form PTO/SB/08. A copy of

each of the non-patent publications identified above is also submitted with this statement.

Applicants take no position on whether any of the items cited above and listed on the

accompanying Form PTO/SB/08 constitute prior art against the subject application under any

particular provision of Title 35 of the United States Code.

Applicants enclose a fee of \$180.00 for the filing of this information disclosure

statement. If any additional fees are deemed due or any overpayment has been made please

charge, or credit our deposit Account No. 11-0171 for such sum.

Respectfully submitted,

Registration No.: 43,131

Attorney for Applicant

Kalow & Springut LLP (212) 813-1600

PTO/SB/08a (08-03) Approved for use through 07/31/2006: OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known Application Number 10/635,108 Filing Date August 5, 2003 First Named Inventor SCARINGE, S. Art Unit 1642 Examiner Name SISSON, Bradley

(Use as many sheets as necessary)

Attorney Docket Number 13561US

U. S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (il known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		^{US-} RE. 34,069	9-15-1992	Koster et al.			
<u> vervivenytrymytr</u>		^{US-} 5,747,244	5-5-1998	Sheridan et al.			
		^{US-} 5,869,696	2-9-1999	Reddy et al.			
		. ^{us-} 5,874,568	2-23-1999	Iwai			
		^{US-} 5,889,136	3-30-1999	Scaringe et al.			
		^{US} 5,932,718	8-3-1999	Letsinger et al.			
		^{⊍s} -6,008,400	12-28-1999	Scaringe et al.			
		^{us-} 6,111,086	8-29-2000	Scaringe			
		^{us-} 6,210,880 B1	4-3-2001	Lyamichev et al.			
		^{us-} 6,294,664 B1	9-25-2001	Ravikumar et al.			
:		^{us} -6,362,323 B1	3-26-2002	Usman et al.			
		^{*us} -6,380,377 B1	4-30-2002	Dattagupta	***************************************		
		^{us-} 6,489,464 B1	12-3-2002	Agrawal et al.			
		^{us-} 6,596,490 B2	7-22-2003	Dattagupta			
		^{US-} 6,677,471 B2	1-13-2004	Cheruvallath et al.	·		
		^{us-} 6,696,255 B2	2-24-2004	Dattagupta			
		^{us-} 2003/0194741A1	10-16-2003	Koster et al.			
		^{US-} 2004/0096947A1	5-20-2004	Sanghvi et al.			

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.¹	Foreign Patent Document Country Code ³ Number * Nind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ^{6*.}				
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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			Application Number	10/635,108		
	INFORMATION	DISCLOSURE	Filing Date	August 5, 2003		
		Y APPLICANT	First Named Inventor	SCARINGE, S.		
	ON A LINE IN L		Art Unit	1642		
	(Use as many she	ets as necessary)	Examiner Name	SISSON, Bradley		
She	eet 2	of 3	Attorney Docket Number	13561US		

Examiner Cite Document Number Publication Date Name of Patentee or Pages, Columns, Lines, Where									
Examiner Initials*	No.1	Document Number	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant				
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		Number-Kind Code ^{2 (ii known)}							
		^{US-} 2004/0152905A1	8-5-2004	Guzaev et al.					
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PTO/SB/08B (08-03)

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INFO	DRMATIO	N DIS	CLOSURE	Filing Date	August 5, 2003	
STA	STATEMENT BY APPLICANT			First Named Inventor	SCARINGE, S.	
				Art Unit	1642	•
(Use as many sheets as necessary)		Examiner Name	SISSON, Bradley			
Sheet	3	of	3	Attorney Docket Number	13561US	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book; magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		Glen Research Corporation Catalog, 1999.	
		PILS, Werner, et al., Flexible non-nucleotide linkers as loop replacements in short double helical RNAs, Nucleic Acids Research, Vol. 28, No. 9, pages 1859-1863 (2000).	
		SCARINGE, Stephen A., et al., Novel RNA Synthesis Method Using 5'-0-Sily 1-2'-O-orthoester Protecting Groups, J. Am. Chem. Soc., Vol. 120, No. 45, pages 11820-11821 (1998).	
		SHCHYOLKINA, A.K., Protein-free parallel triple-stranded DNA complex formation, Nucleic Acids Research, 2001, Vol. 29, No. 3, pages 986-995 (2001).	
		THELWELL, Nicola, et al., Mode of action and application of Scorpion primers to mutation detection, Nucleic Acids Research 2000, Vol. 28, No. 19, pages 3752-3761 (2000).	
		140. 15. pages 57 52-57 61 (2000).	
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